



Docket No.: 99-054 US

PATENT

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of:

John Robert Patterson, et al.

Group Art Unit: 1713

Serial No.: 09/661,816

Confirmation No.: 1262

Examiner: Robert D. Harlan

Filed: 09/14/2000

For: CHLORINATED VINYL RESIN /  
CELLULOSE BLENDS: COMPOSITIONS,  
PROCESSES, COMPOSITES AND  
ARTICLES THEREFROM X

Assistant Commissioner of Patents  
Washington, DC 20231

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**DECLARATION OF INVENTOR JOHN ROBERT PATTERSON**

I, JOHN ROBERT PATTERSON, being of full age and sound mind, declare the following:

1. Unless otherwise indicated herein, I have personal knowledge of the facts recited hereinafter.
2. This Declaration is being prepared and submitted in support of a Response to an Office Action mailed November 21, 2002 in connection with the above-identified Application (hereinafter referred to as the "Application" or the "present Application").
3. My educational background is as follows. I hold a Bachelor of Science degree in chemistry, which I earned in 1970 from La Salle University of Philadelphia, Pennsylvania. I also earned a Masters of Business Administration in 1981 from Temple University of Philadelphia, Pennsylvania.
4. I have been employed for the past forty-one years by Rohm and Haas Company of Philadelphia, Pennsylvania (hereinafter referred to as the "Company"), which is the assignee of the present Application.
5. During my employment with the Company, I have worked as a chemist and a process engineer. During the past twenty years, I have also held various positions, including technical service group leader and manager, within the Company's Plastics

Additives Technical Service department, which provides technical assistance to the Company's customers.

6. I am one of three co-inventors of the invention which is disclosed and claimed in the present Application and I participated in the preparation of the present Application as part of my employment with the Company.

7. Generally, the present invention, as claimed in independent Claim 10 of the present Application, relates to a process for preparing an extrudable powder blend having the following components: chlorinated vinyl resin ("PVC", 30-65 wt%), cellulosic material (such as wood flour, 24-65 wt%), thermal stabilizers (0.25-5 wt%), and lubricants (1.5-5 wt%), processing aids (3.5-15 wt%).

8. Upon information and belief, I understand that the United States Patent and Trademark Office Examiner has issued an Office Action dated November 21, 2002 in connection with the present Application.

9. I further understand, based upon information and belief, that the aforesaid Office Action rejects Claims 10-20 of the present Application as being anticipated by the disclosure of European Patent Publication No. EP 0 807 510.

10. During preparation of the present Application, I and my co-inventors considered the disclosure and claims of U.S. Patent No. 5,847,016, which is the corresponding U.S. equivalent of EP 0 807 510.

11. More specifically, since the composition of the present invention specifically involves PVC blends, we reviewed the components and composition of the composite recited in Claim 5 of U.S. 5,847,016 that is directed specifically to a composite including polyvinyl chloride ("PVC") as the resin, as well as wood flour and various additives.

12. After converting the units of parts by volume, which are recited in U.S. 5,847,016, to units of weight percent, which are the units recited in the present Application, we determined that the composite of Claim 5 of U.S. 5,847,016 included, at most, about 17 % by weight of wood flour. This conclusion is stated in the background portion of the present Application at page 2, lines 5-12.

13. To perform the aforesaid unit conversions, we researched the specific gravities of the various components recited in Claim 5 of U.S. 5,847,016 (i.e., polyvinyl chloride, wood flour, stabilizers, lubricants, process aids, blowing agents and colorants) using standard industry literature resources including, but not limited to, data published by American Wood Fibers, as well as DuPont and PolyOne (formerly Geon).

14. The following table provides the data calculations that we performed as described in paragraphs 11-13 hereinabove.

Ingredient	Parts by Volume	Percent (Volume)	Specific Gravity	Parts by Weight	Percent (Weight)
PVC resin	100	51.3	1.40	140.0	56.1
<b>wood flour</b>	60	30.8	0.70	42.0	<b>16.8</b>
blowing agent	5	2.6	1.00	5.0	2.0
stabilizer	5	2.6	1.00	5.0	2.0
lubricants	5	2.6	0.90	4.5	1.8
processing aids	10	5.1	1.10	11.0	4.4
colorants	10	5.1	4.20	42.0	16.8
TOTAL	195	100.0		249.5	100.0

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15. Similarly, with regard to EP 0 807 510 (relied upon the in the aforesaid Office Action), Claim 10 thereof recites a composite wherein the resin is PVC (as in the present invention) and the composite also includes wood flour, stabilizers, lubricants, process aids, blowing agents and colorants. Based upon the upper limits of the compositional ranges provided by Claim 10 (which are the same as recited in Claim 5 of U.S. 5,847,016) and the calculations demonstrated in the table of paragraph 13 hereinabove, the wood flour content of this composite would also be, at most, about 17 percent by weight, based upon the total weight of the composite.

16. Furthermore, I would also point out that the disclosure of EP 0 807 510 provides examples for composites having greater than 65 parts by volume of wood flour only where the resin is polystyrene, rather than PVC. The present invention does not include polystyrene and the claims of the present Application are directed specifically only to PVC resins.

17. Based upon the foregoing discussion and calculations, I conclude that EP 0 807 510 does not disclose or teach a PVC-containing composite having greater than about 17 percent by weight of wood flour, based upon the total weight of the composition.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Respectfully submitted,

Date: **March 20, 2003**



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